NATIONAL ASSESSMENT PROGRAM
LITERACY AND NUMERACY

NUMERACY
NON-CALCULATOR

YEAR 7

SAMPLES

BOOKLET 1

The following questions are examples of NAPLAN style questions.
They have been sorted into the following categories:

- SPACE & GEOMETRY
- NUMBER
- ALGEBRA & PATTERNS
- MEASUREMENT
- DATA

NAME: _____

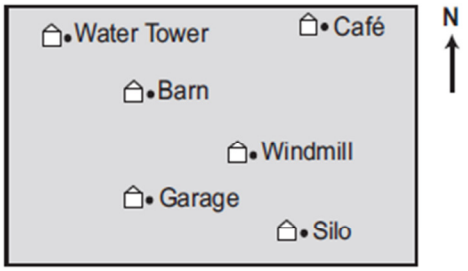
SPACE & GEOMETRY

In this topic area you should have a good understanding of the following:

- **Prisms, Pyramids and other solids;**
- **Faces, Edges and Vertices;**
- **Views of 3D shapes from different orientations;**
- **Isometric drawings;**
- **Nets of solids;**
- **Clockwise, anti-clockwise, quarter, three-quarter;**
- **Left and right;**
- **Compass directions;**
- **Names & properties of 2D shapes;**
- **Angles;**
- **Reading a protractor;**

SPACE & GEOMETRY

1 This map shows the position of some of the buildings in the town of Bendy.

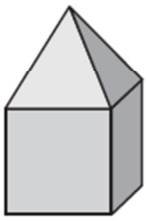


Shade one bubble.

Which building is West of the Windmill and North of the Barn?

Silo ○ Café ○ Garage ○ Water Tower ○

4 A square-based pyramid and a cube have been glued together.



How many **faces** does the new object have?

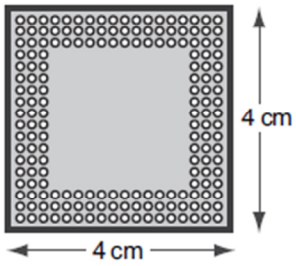
4 ○ 8 ○ 9 ○ 11 ○

6 Which dotted line is a line of symmetry?

○ ○ ○ ○

12 A computer chip has dimensions 8 mm × 8 mm.
A scale drawing is shown below.

Shade one bubble.

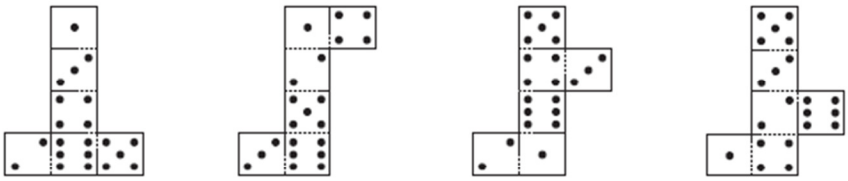


What scale is used in the drawing?

- ○ 1 cm represents 5 mm
- ○ 1 cm represents 2 mm
- ○ 2 cm represents 1 mm
- ○ 5 cm represents 1 mm

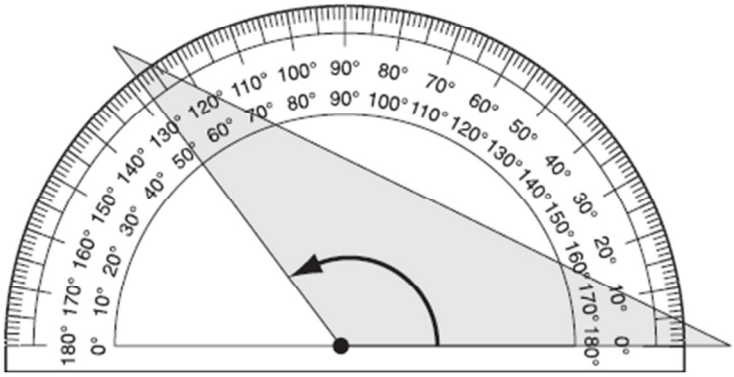
20 Here is a standard die.
The sum of the dots on opposite faces is 7.

Which is the net of this die?



○ ○ ○ ○

21



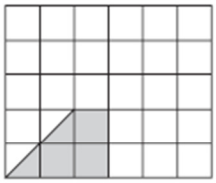
Write your answer in the box.

What is the size of the angle in the shaded triangle marked by the arrow?

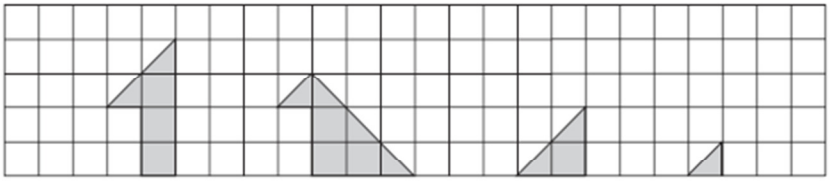
[ ] degrees

27 Tara drew this shape on square grid paper.

Shade one bubble.



Which one of the shapes below, when joined (with no overlap) with Tara's shape, will **not** make a right-angled triangle?



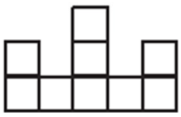
○ ○ ○ ○

29 This object was made using identical cubes.

Right side

Front

This is a drawing of the view from the front.



Front view

Which drawing shows the view from the right side?

○ ○ ○ ○

NUMBER

In this topic area you should have a good understanding of the following:

- **Place value;**
- **Writing numbers in numerical form;**
- **The four operations and order of operations;**
- **Integers & the four operations;**
- **Percentages;**
- **Fractions & the four operations;**
- **Decimals & the four operations;**
- **Rates & Ratio;**
- **Multiples and Factors;**
- **Products of Prime Factors**

NUMBER

3 Another way of writing 6^2 is

6×2 ○ 6×6 ○ $6 + 6$ ○ $2 \times 2 \times 2 \times 2 \times 2 \times 2$ ○

7 What is \$10 as a percentage of \$40?

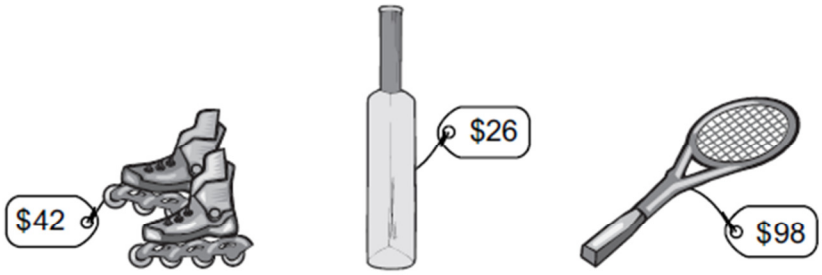
4% ○ 10% ○ 25% ○ 40% ○

10 What is the missing number?

Write your answer in the box.

$4 \times \square = 8 \times 3$

11



Shade one bubble.

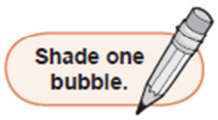
What is the best way to estimate the total cost of these three objects?

- ○ \$40 + \$20 + \$90
- ○ \$40 + \$20 + \$100
- ○ \$40 + \$30 + \$90
- ○ \$40 + \$30 + \$100

13 Which number is greater than 0.08?

0.1 ○ 0.009 ○ 0.07 ○ 0.0089 ○

15 John is using this pancake recipe.



Pancake recipe *Makes 8 pancakes*
Ingredients
1 cup flour
2 eggs
1 cup milk
$\frac{1}{2}$ cup sugar
20g butter

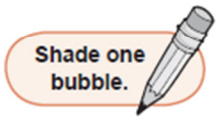
How many cups of sugar are needed for 40 pancakes?

$2\frac{1}{2}$ ○ 4 ○ 5 ○ 20 ○

19 Which fraction has the same value as $2\frac{3}{4}$?

$\frac{8}{4}$ ○ $\frac{9}{4}$ ○ $\frac{11}{4}$ ○ $\frac{14}{4}$ ○

25 A garden centre sells a potting mix made up of soil, compost and sand.



Soil makes up $\frac{2}{3}$ of the mix and compost makes up $\frac{1}{4}$ of the mix.

What fraction of the potting mix is sand?

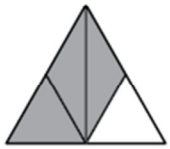
$\frac{1}{12}$ ○ $\frac{3}{7}$ ○ $\frac{5}{12}$ ○ $\frac{4}{7}$ ○

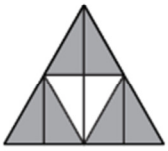
28 What is the answer to $6.6 \div 0.3$?

0.022 ○ 0.22 ○ 2.2 ○ 22 ○

30 Which diagram does **not** have $\frac{3}{4}$ of the area shaded?

Shade one bubble.





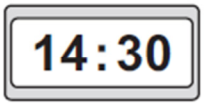
MEASUREMENT

In this topic area you should have a good understanding of the following:

- **Comparing lengths;**
- **Converting units of measurement :**
    - **Length;**
    - **Mass;**
    - **Capacity;**
    - **Time;**
    - **Area;**
    - **Volume**
- **Estimating;**
- **Calculating perimeters and areas;**
- **Applying your knowledge of measurement to word problems**

MEASUREMENT

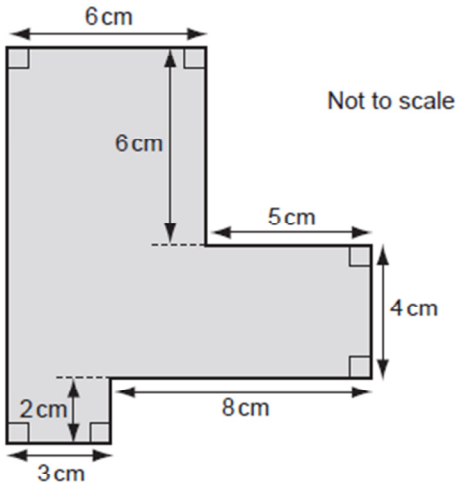
2



Which time is the same as the time shown on this digital clock?

2:30 am	2:30 pm	4:30 am	4:30 pm
○	○	○	○

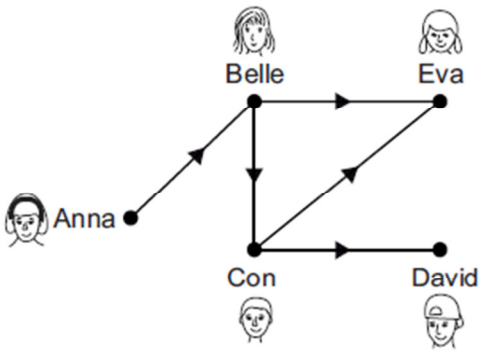
14

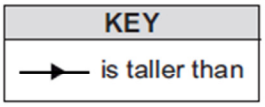


What is the perimeter of this shape?

34 cm	36 cm	46 cm	74 cm
○	○	○	○

17 Five students compared their heights.
This diagram shows their results.

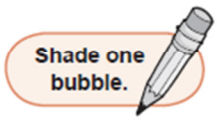




Which student is the tallest?

Anna	Belle	Con	David	Eva
○	○	○	○	○

18 This is a movie program.



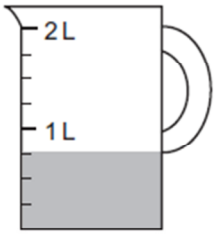
PROGRAM		
Movie	**Start time**	**Length**
Blue Sky	10:00 am, 12:30 pm, 3:30 pm	1 hour 37 mins
Fuzzy Dog	3:00 pm, 7:00 pm	2 hours
The King	11:00 am, 2:15 pm, 6:00 pm	1 hour 40 mins
Kids at School	2:05 pm, 5:00 pm	2 hours 30 mins

Gina arrives at the movie theatre at 2:00 pm. Her mother will pick her up at 4:00 pm.

Which movie could Gina watch from start to finish?

Blue Sky ⬭ Fuzzy Dog ⬭ The King ⬭ Kids at School ⬭

23 This jug has some milk in it.



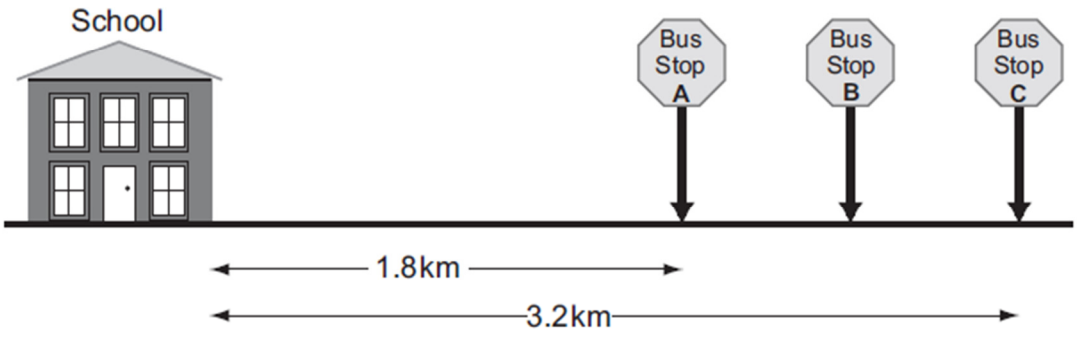
If Eve adds an extra 500 mL of milk to the jug,
how many millilitres (mL) of milk will then be in the jug? ☐ mL

26 This picture shows the position of three bus stops on the road leading to a school.

Write your answer in the box.

Bus Stop B is **exactly halfway** between Bus Stop A and Bus Stop C.

Not to scale



What is the distance between the **School** and **Bus Stop B**? ____ km

DATA

In this topic area you should have a good understanding of the following:

- **Reading and interpreting different types of graphs and tables:**
    - **Line graphs;**
    - **Column graphs;**
    - **Bar charts;**
    - **Sector graphs;**
- **Probability**
- **Average**

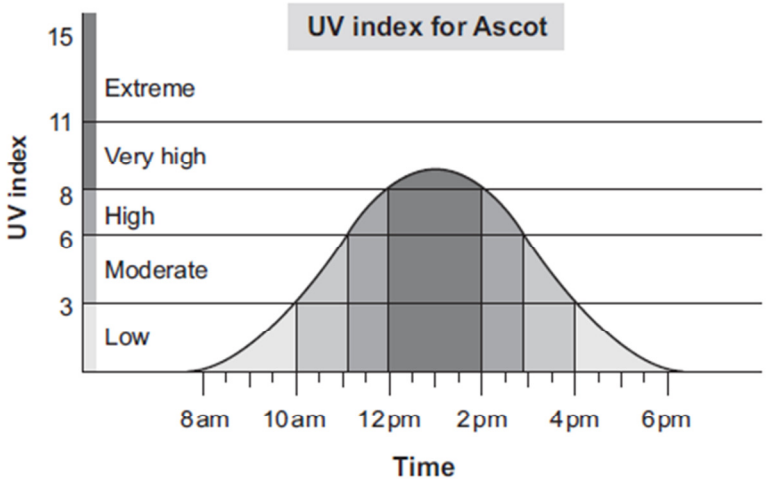
DATA

8 Lee takes one ball out of his bucket without looking.
It is very likely, but not certain, that he will get a **black** ball.

Which is Lee's bucket?

9 This graph shows the UV index for the town of Ascot during one day.

Shade one bubble.



When was the UV index always in the low range?

- between 8 am and 6 pm
- before 10 am and after 4 pm
- before 10 am only
- after 4 pm only

16 There are 50 marbles in a bag. Ten marbles are red, the others are black.
Emma picks a marble from the bag without looking.

What is the chance of her picking a **red** marble?

1 in 10 | 2 in 10 | 4 in 10 | 5 in 10

22 This table shows the results of a survey on mobile phone bills.

Monthly bill

Age	$20 or less	Greater than $20 and less than $30	$30 or more
Under 20	12	28	18
20 – 40	8	14	13
Over 40	15	17	12

In total, how many people under the age of 20 had a monthly bill of **less than $30**? _____ people

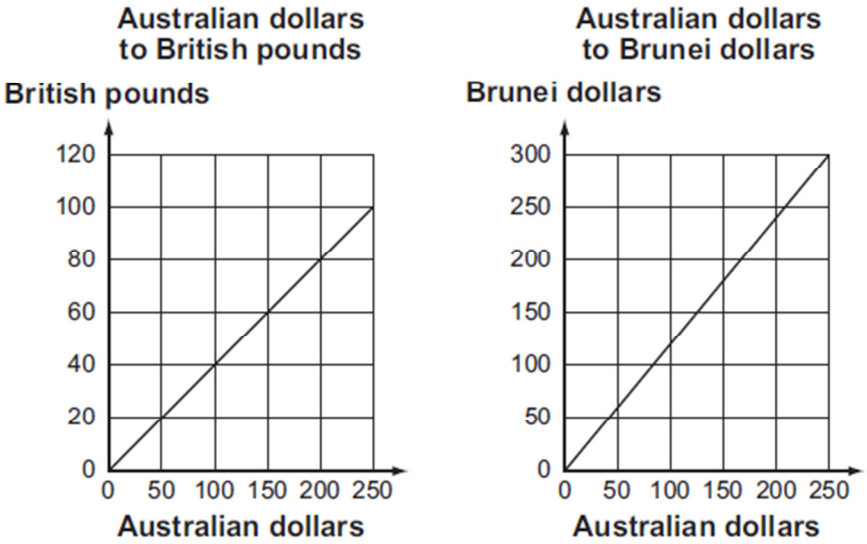
24 Ann recorded the colour of 50 cars in this table.

Write your answer in the box.

Car colour	Number of cars
White	25
Blue	4
Yellow	5
Red	?
TOTAL	**50**

What percentage of the cars is red? _____ %

32 Alex uses these two conversion graphs.



How many Brunei dollars are equal in value to 50 British pounds?

_____ Brunei dollars

ALGEBRA & PATTERNS

In this topic area you should have a good understanding of the following:

- **Converting word problems to algebraic expressions and vice versa;**
- **Completing tables of values;**
- **Describing a geometric pattern;**

ALGEBRA

5 Jen is making this brick pattern.

Shade one bubble.

Shape 1 Shape 2 Shape 3 Shape 4

This table shows the number of bricks she needs for each shape in her pattern.

Shape	1	2	3	4	5
Number of bricks	1	4	9	16	?

How many bricks are needed for Shape 5?

24 ⬭ 25 ⬭ 29 ⬭ 30 ⬭

31 Ben puts 7 flowers in each of 8 vases.
He has 3 flowers left over.
Ben wants to put 9 flowers in each vase.

Write your answer in the box.

How many **more** flowers does he need? ☐ flowers